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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,873	11/20/2003	Daniel J. Falla	60665B	9382
109	7590	10/19/2005	EXAMINER	
THE DOW CHEMICAL COMPANY INTELLECTUAL PROPERTY SECTION P. O. BOX 1967 MIDLAND, MI 48641-1967			KRUER, KEVIN R	
			ART UNIT	PAPER NUMBER
			1773	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/717,873	FALLA ET AL.
Examiner	Art Unit	
Kevin R. Kruer	1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 18 August 2005.

2a) This action is FINAL.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-13 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-13 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The rejection of claim 11 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been overcome by amendment.

### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 3-8, 10, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1087801 (herein referred to as Sheller) in view of Burns (US 5,710,184) for reasons of record.

Sheller teaches a cork gasket having improved coating (page 1, lines 10+). The coating lowers vapor transmission rate of the sealed fluid (page 1, line 25). The cork is coated with an emulsion of an acrylic-modified vinylidene chloride copolymer (page 1, lines 47+). One such polymer is Rhoplex R-9 (page 2, line 4), which is herein understood to read on the polymer of claim 6. The coating may further comprise a plasticizer, herein relied upon to read on the claimed thixotropic agent, in amounts of 1-0 wt% (page 2, lines 30+). Said coating is applied to the entire outer surface (page 1, lines 75+) of a cork (page 1, line 48+). The coating is applied by immersing or spray coating the cork, and drying the cork by heating in an oven (page 1, lines 85+).

With regard to the method limitations of claims 1, 7, 8, and 10 and the solvent of claims 11 and 13, the examiner takes the position that said limitations are method

limitations. The courts have held that a method of making a product does not patentably distinguish a claimed product from a product taught in the prior art unless it can be shown that the method of making the product inherently results in a materially different product. In the present application, no such showing has been made. The solvent is understood to be a method limitation because it is evaporated away in the final product.

Sheller does not teach that the cork should comprise synthetic cork. However, Burns teaches that natural cork suffers with respect to color, drying, shrinkage, crumbling, sticking and cost (col 1, lines 30+). Burns teaches a molded closure comprising a thermoplastic elastomer and a blowing agent that may be used in place of cork (abstract). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the synthetic cork taught in Burns in place of the cork taught in Sheller. The motivation for doing so is that the synthetic cork has improved characteristics with regard to color, dimensional stability, crumbling, and cost.

4. Claims 2 and 9 are rejected under 35 USC 103(a) as being obvious over GB 1087801 (herein referred to as Sheller) in view of Burns (US 5,710,184), as applied to claims 1, 3-8, 10, 11 and 13, and further in view of WO96/28378 (herein referred to as Dewar) for reasons of record.

Sheller in view of Burns is relied upon as above, but does not teach that only one surface of the cork should be coated. However, Dewar teaches a coated cork wherein the coating is applied only to a single face (page 3, lines 1+). Thus, it would have been

obvious to only coat a single face of the cork taught by Sheller. The motivation for doing so would have been to reduce cost.

5. Claim 12 is rejected under 35 USC 103(a) as being obvious over GB 1087801 (herein referred to as Sheller) in view of Burns (US 5,710,184), as applied to claims 1, 3-8, 10, 11 and 13, and further in view of Murphy et al (US 4,320,047) for reasons of record.

With regard to claim 12, Sheller teaches that the coating may comprise a thixotropic agent, but does not explicitly teach the addition of silica to said coating. However, Murphy teaches that silica is a known thixotropic agent (col 1, lines 1+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the thixotropic agents taught in Murphy as the thixotropic agent taught in Sheller. The motivation for doing so is that silica is a known thixotropic agent.

#### ***Response to Arguments***

Applicant's arguments filed August 18, 2005 have been fully considered but they are not persuasive.

Applicant argues Sheller is not applicable to the present invention because it relates to cork "placed between confronting faces of adjacent machines" not to corks for liquid containers. The examiner respectfully disagrees. Said disclosure is drawn to a cork gasket used to prevent the passage of vapor and/or fluid, which reads on the claimed "synthetic cork closure." With regard to the recited intended use in the preamble, MPEP 2111.02 states that a preamble is not considered a limitation and is of

no significance to claim construction when the preamble merely states the purpose or intended use of the invention. Furthermore, the cork gasket taught in Sheller is interpreted to meet the preamble limitation "closure for a liquid container" because the gasket is capable of performing the intended use as recited in the preamble (see MPEP 2111.02).

According to Applicant, the combination of Sheller with Burns is improper because the teachings of natural cork stoppers and synthetic cork closures are not interchangeable. Natural cork and synthetic cork, according to Applicant comprise different materials with different crumbling, barrier, expansion coefficient, and mold resistance properties. The examiner agrees said materials are different (as all materials are) but respectfully disagrees with applicant's conclusion that said difference make the combination non-obvious. As noted by Applicant, synthetic cork closures have been introduced in the field of endeavor to solve problems with natural cork closures. Thus, synthetic cork and natural cork closures are in the same field of endeavor. A prior art reference is analogous if the reference is in the field of applicant's endeavor or, if not, the reference is reasonably pertinent to the particular problem with which the inventor was concerned.

Applicant further argues Sheller and Burns are not combinable because Sheller is drawn to a gasket between confronting faces of adjacent machine elements and Burns is drawn to a closure for liquid containers. Said references have been fully considered and the examiner maintains applicant has read the teachings of the Sheller reference too narrowly with regards to the intended use of said cork closures. The cork

closure taught in Sheller reads on the use of said closure in any environment wherein cork is commonly used to seal fluids (col 1, lines 25). The most common area wherein corks are used to seal fluids is in the packaging of fluid materials. Thus, the examiner maintains the position that Sheller and Burns are in the same field of endeavor and that the closure of Sheller meets the preamble limitation of claim 1 for the reasons noted above.

Applicant further argues the problems faced by the references are very different. The examiner respectfully disagrees. As applicant notes, the uncontrolled permeation of gasses in and out of cork and the scalping of flavors caused by the polymers used" is a problem in the cork closure art (see page 1 of specification). The teachings of Sheller are drawn to improving the gas permeability of cork closures. Thus, the problems addressed in the prior art are the same problems addressed by Applicant's invention.

Applicant argues Sheller describes the gaskets in sheet form, a shape seldom associated with corking liquids in containers. Said argument is noted but is not commensurate in scope with the claims. The claims currently recite no structural limitations. Furthermore, the examiner maintains the position the preamble does not read any structural limitations into the claim. The examiner further notes Sheller is not limited with regard to the structure of the cork gasket taught therein.

One of ordinary skill in the art would not have been motivated to combine the teachings of Sheller and Burns, according to Applicant, because Burns teaches said synthetic corks are able to prevent passage of oxygen from the atmosphere to the wine (col 3, lines 23+). While said teaching is noted, the gas permeability of synthetic corks

is known to be unacceptable (see page 1 of specification). Thus, the examiner maintains the position one of ordinary skill in the art would have been motivated to combine the teachings of Sheller and Burns for the reasons noted in the rejection.

With regard to claim 3 wherein it is required that both ends of the closure are coated with gas impermeable polymer, Applicant argues the teaching of Sheller that the gasket be completely covered with the coating does not teach or suggest such a limitation. The examiner respectfully disagrees. If the entire gasket is covered, then both ends are coated.

Applicant disputes the allegation that a plasticizer is a thixotropic agent and requests a reference showing plasticizers work as thixotropic agents. The examiner points applicant to the definitions they provided. Specifically, a plasticizer is included into a polymer to improve its workability, which is understood to be the same as decreasing the viscosity of the polymer-thereby meeting the definition of a "thixotropic agent."

Applicant also disputes the idea that solvent is a "method" step because solvent "appears to result in penetration that avoids separation." The examiner initially notes said argument is not conclusive because applicant's arguments cannot take the place of evidence. Furthermore, Sheller teaches the use of a solvent. Specifically, the coating is described as an emulsion (page 2, lines 1+).

With regard to Dewar, Applicant argues the motivation is not obtained from the reference as required. The examiner notes the motivation need not be explicit in a reference, but may be implied. Obviousness can only be established by combining or

modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either *explicitly* or *implicitly* in the references themselves or in the knowledge generally available to one of ordinary skill in the art. Said teaching does not ruin the invention of Sheller since Dewar teaches adequate barrier properties may be obtained by coating one side of the cork closure.

With regard to claim 9, Dewar is not limited with regard to what portion of the closure is coated. Therefore, said method does not render the claimed cork closure non-obvious. Furthermore, the examiner notes the claim is drawn to a cork closure, not a container containing a cork closure. Thus, the cork taught by Sheller in view of Burns and Dewar is identical to the claimed cork.

With regard to Murphy, Applicant argues Sheller teaches the addition of a plasticizer, not a thixotropic agent. However, as noted above, said terms are understood to be synonyms. Applicant further argues there is no motivation to combine said references. The examiner respectfully disagrees. Sheller teaches the addition of a processing aid to improve the workability of the composition. Murphy teaches silica is such a processing aid. An express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. *In re Fout*, 675 F.2d 297, 213 USPQ 532 (CCPA 1982).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin R. Kruer



Patent Examiner-Art Unit 1773